

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICANTS: AKINS ET AL. GRP. ART UNIT: 2132
APPL. NO.: 09/930,901 EXAMINER: G. BARRON, JR.
FILED: AUGUST 16, 2001 DOCKET NO.: A-7598
TITLE: REPRESENTING ENTITLEMENTS TO SERVICE IN A CONDITIONAL
ACCESS SYSTEM

JULY 19, 2002

INFORMATION DISCLOSURE STATEMENT

Received

JUL 19 2002

Commissioner for Patents
Washington, D.C. 20231

Technology Center 2100

Sir:

This information disclosure statement is filed in accordance with 37 C.F.R. §§ 1.56, 1.97, and 1.98, and specifically:

- ☒ under 37 CFR 1.97(b), or
(within Three months of filing national application; or date of entry of international application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97(c) together with either a:
☐ Statement Under 37 C.F.R. 1.97(e), or
☐ a \$180.00 fee under 37 CFR 1.17(p), or
(After the CFR 1.97(b) time period, but before the final office action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97(d) together with a:
☐ Statement under 37 CFR 1.97(e), and
☐ a \$180.00 petition fee set forth in 37 CFR 1.17(i)(1).
(Filed after final office action or notice of allowance, whichever occurs first, but before payment of the issue fee)

Please charge \$0.00 to deposit account 19-0761. At any time during the pendency of this application, please charge any fees required to Deposit Account 19-0761 pursuant to 37 CFR 1.25. The Commissioner is hereby requested to credit any overpayment to Deposit Account No. 19-0761.

- ☒ Applicant(s) submit herewith *Form PTO 1449 - Information Disclosure Citation* together with copies of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may or may not be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56. As required by 37 C.F.R. §1.98(a), a legible copy of each document is provided.

a.

The Cited Art includes:

- | | | | |
|--------------|--------------|---------------|---------------|
| 1. 4,155,042 | 5. 4,531,020 | 9. 4,649,533 | 13. 4,736,422 |
| 2. 4,358,672 | 6. 4,600,921 | 10. 4,658,093 | 14. 4,823,385 |
| 3. 4,388,643 | 7. 4,613,901 | 11. 4,712,238 | 15. 4,864,615 |
| 4. 4,405,829 | 8. 4,634,807 | 12. 4,712,239 | 16. 4,866,770 |

JUL 19 2002

Technology Center 2100

17. 4,885,777	37. 5,270,822	57. 5,488,410	77. 5,671,276
18. 4,887,296	38. 5,282,248	58. 5,497,422	78. 5,675,649
19. 4,912,762	39. 5,282,249	59. 5,499,294	79. 5,740,246
20. 4,982,430	40. 5,285,497	60. 5,499,295	80. 5,742,677
21. 4,993,068	41. 5,301,233	61. 5,506,904	81. 5,764,770
22. 5,003,591	42. 5,341,425	62. 5,509,073	82. 5,787,172
23. 5,018,196	43. 5,343,527	63. 5,519,780	83. 5,857,020
24. 5,029,207	44. 5,381,477	64. 5,524,052	84. 5,862,220
25. 5,036,537	45. 5,381,481	65. 5,550,984	85. 5,870,474
26. 5,073,935	46. 5,400,401	66. 5,557,678	86. 5,920,626
27. 5,124,117	47. 5,402,490	67. 5,557,765	87. 6,005,938
28. 5,142,578	48. 5,414,773	68. 5,559,889	88. 6,105,134
29. 5,151,782	49. 5,420,866	69. 5,563,950	89. 6,246,767
30. 5,155,591	50. 5,425,101	70. 5,565,909	90. RE 33,189
31. 5,175,765	51. 5,432,542	71. 5,568,552	91. RE 33,808
32. 5,231,665	52. 5,440,633	72. 5,568,554	92. EP 0 723 371 A
33. 5,235,643	53. 5,465,299	73. 5,583,939	93. EP 0 752 786 A
34. 5,237,610	54. 5,473,692	74. 5,588,058	94. WO 94/13107 A
35. 5,243,652	55. 5,481,542	75. 5,590,202	95. WO 95/29560 A
36. 5,249,230	56. 5,481,613	76. 5,621,793	

OTHER PRIOR ART

ISO/IEC 13818-1, "Information Technology – Generic Coding of Moving Pictures and Associated Audio Systems," Draft of: November 13, 1994.

ISO/IEC JTC1/SC29/WG11, "Universal Multi-Program Multiplex and Transport for MPEG-2 Systems," January 1993.

ISO/IEC JTC1/SC29/WG11, "An MGE2-2 Multi-Program Multiplex Syntax," January 1993.

ISO/IEC JTC1/SC2/WG11, "Requirements and Method for High-Level Multiplexing of MPEG and Other Digital Service Bitstreams with Universal Transport Layer," November 1992.

Whitfield, Diffie, "Authentication and Authenticated Key Exchanges," DESIGNS, CODES AND CRYPTOGRAPHY, An International Journal, Vol. 2, No. 2, June 1992, pages 107-125.

Schneier, Bruce, "Applied Cryptography Second Edition: Protocols, Algorithms and Source Code in C," pages 357-363.

Menezes, Alfred J., "Handbook of Applied Cryptography," pages 506-525.

TM-1244 Rev. 4, "Final Technical Report of the Conditional Access Specialist Group," November 17, 1994.

Coutrot et al., "A Single Conditional Access System for Satellite-Cable and Terrestrial TV," IEEE Transactions on Consumer Electronics, Vol. 35, No. 3, August 1989, pages 464-468.

Louis Claude Guillou and Jean-Luc Giachetti, "Encipherment and Conditional Access," SMPTE Journal, 103 (1994) June, No. 6, White Plains, NY.

- ☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individual(s) designated in 37 CFR 1.56(c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on the form PTO 1449 and is enclosed herewith.

The following rights are reserved by the Applicant(s): the right to establish the patentability of the claimed invention over any of the listed documents should they be applied as reference, and/or the right to prove that some of these documents may not be prior art, and/or the right to prove that some of these documents may not be enabling for the teachings they purport to offer.

This statement should not be construed as a representation that an exhaustive search has been made, or that information more material to the examination of the present application does not exist. The Examiner is specifically requested not to rely solely on the materials submitted herewith. The Examiner is requested to conduct an independent and thorough review of the documents, and to form independent opinions as to their significance.

It is requested that the information disclosed herein be made of record in this application and that the Examiner initial and return a copy of the enclosed PTO-1449 to indicate the documents have been considered.

Respectfully Submitted,

Received

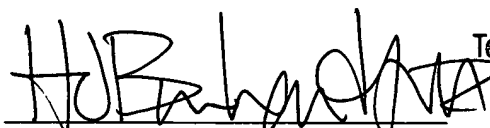
JUL 19 2002

Technology Center 2100

SEND CORRESPONDENCE TO:

Scientific-Atlanta, Inc.
Intellectual Property Dept. MS 4.3.518
5030 Sugarloaf Parkway
Lawrenceville, GA 30044

By:



HUBERT J. BARNHARDT III
Attorney of Record
Reg. No.: 36,739
Phone: (770) 236-5950
Fax No.: (770) 236-4806

Certificate of Hand Delivery

I, Bette Hetz, hereby certify that this correspondence with all attachments was hand-delivered to Examiner G. Barron, Jr. at the United States Patent and Trademark Office on July 19, 2002.

Bette Hetz
Signature
Bette Hetz
Printed Name

#2
8-6-02
JM

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APPLICANTS: AKINS ET AL. GRP. ART UNIT: 2132
APPL. NO.: 09/930,901 EXAMINER: G. BARRON, JR.
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TITLE: REPRESENTING ENTITLEMENTS TO SERVICE IN A CONDITIONAL
ACCESS SYSTEM

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TRANSMITTAL OF INFORMATION DISCLOSURE STATEMENT

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Commissioner for Patents
Washington, D.C. 20231

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Technology Center 2100

Sir:

Transmitted herewith for filing in the above-identified patent application, please find:

1. X 3 Page Information Disclosure Statement
2. X 7 Page Form PTO-1449
3. X Copy of Cited Art
4. X Return Postcard

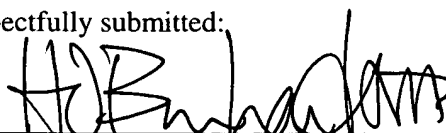
In the event a fee is required, the Commissioner is hereby authorized to charge payment of any fees required in connection with this Information Disclosure Statement to our Deposit Account No. 19-0761. A duplicate copy of this letter is transmitted herewith.

Respectfully submitted:

SEND CORRESPONDENCE TO:

Scientific-Atlanta, Inc.
Intellectual Property Dept. MS 4.3.518
5030 Sugarloaf Parkway
Lawrenceville, GA 30044

By:


HUBERT J. BARNHARDT III
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Signature
Bette Hetz
Printed Name

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Form PTO-1449

U.S. Dept. of Commerce, Patent and Trademarks

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LIST OF ART CITED BY APPLICANT

(Use several sheets if necessary)

Technology Center 2100

Attorney Docket No. A-7598		Serial No. 09/930,901		Filing Date AUGUST 16, 2001			
Applicant: AKINS ET AL.			Group 2132				
U.S. PATENT DOCUMENTS							
Exami ner's Initial		Document No.	Date	Name	Class	Subclass	
	AA	4,155,042	5/15/79	Permut et al.			
	AB	4,358,672	11/9/82	Hyatt et al.			
	AC	4,388,643	6/14/83	Aminetzah			
	AD	4,405,829	9/20/83	Rivest et al.			
	AE	4,531,020	6/23/95	Weschselberger et al.			
	AF	4,600,921	7/15/86	Thomas et al.			
	AG	4,613,901	9/23/86	Gilhousen et al.			
	AH	4,634,807	1/6/87	Chorley et al.			
	AI	4,649,533	3/10/97	Chorley et al.			
	AJ	4,658,093	4/14/87	Hellman			
	AK	4,712,238	12/8/87	Gilhousen et al.			
	AL	4,712,239	12/8/87	Frezza			
	AM	4,736,422	4/5/88	Mason			
	AN	4,823,385	4/18/89	Hegendörfer			
	AO	4,864,615	9/5/89	Bennett et al.			
	AP	4,866,770	9/12/89	Seth-Smith et al.			
	AQ	4,885,777	12/5/89	Takaragi et al.			
	AR	4,887,296	12/12/89	Horne			

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Applicant: AKINS ET AL.			Group 2132			
U.S. PATENT DOCUMENTS						
Exami ner's Initial		Document No.	Date	Name	Class	Subclass
	AS	4,912,762	3/27/90	Lee et al.		
	AT	4,982,430	1/1/91	Frezza et al.		
	AU	4,993,068	2/12/91	Piosenka et al		
	AV	5,003,591	3/26/91	Kauffman		
	AW	5,018,196	5/21/91	Takaragi et al.		
	AX	5,029,207	7/2/91	Gammie		
	AY	5,036,537	7/30/91	Jeffers et al.		
	AZ	5,073,935	12/17/91	Pastor		
	BA	5,124,117	6/23/92	Tatebayashi et al.		
	BB	5,142,578	8/25/92	Matyas et al.		
	BC	5,151,782	9/29/92	Ferraro		
	BD	5,155,591	10/13/92	Wachob		
	BE	5,175,765	12/29/92	Perlman		
	BF	5,231,665	7/27/93	Auld et al.		
	BG	5,235,643	8/10/93	Anderson et al.		
	BH	5,237,610	8/17/93	Gammie et al.		
	BI	5,243,652	9/7/93	Teare et al.		
	BJ	5,249,230	9/28/93	Mihm, Jr.		

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Applicant: AKINS ET AL.		Group 2132				
U.S. PATENT DOCUMENTS						
Exami ner's Initial		Document No.	Date	Name	Class	Subclass
	BK	5,270,822	12/14/93	Choi		
	BL	5,282,248	1/25/91	DeJoy		
	BM	5,282,249	1/25/94	Cohen et al.		
	BN	5,285,497	2/8/94	Thatcher, Jr.		
	BO	5,301,233	4/5/94	Coutrot et al.		
	BP	5,341,425	8/23/94	Wasilewski et al.		
	BQ	5,343,527	8/30/94	Moore		
	BR	5,381,477	1/10/95	Beyers III et al.		
	BS	5,381,481	1/10/95	Gammie et al.		
	BT	5,400,401	3/21/95	Wasilewski et al.		
	BU	5,402,490	3/28/95	Mihm, Jr.		
	BV	5,414,773	5/9/95	Handelman		
	BW	5,420,866	5/30/95	Wasilewski		
	BX	5,425,101	6/13/95	Woo et al.		
	BY	5,432,542	7/11/95	Thibadeau et al.		
	BZ	5,440,633	8/8/95	Augustine et al.		
	CA	5,465,299	11/7/95	Matsumoto et al.		
	CB	5,473,692	12/5/95	Davis		

Form PTO-1449		U.S. Dept. of Commerce, Patent and Trademarks LIST OF ART CITED BY APPLICANT (Use several sheets if necessary)				
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Applicant: AKINS ET AL.				Group 2132		
U.S. PATENT DOCUMENTS						
Exami ner's Initial		Document No.	Date	Name	Class	Subclass
	CC	5,481,542	1/2/96	Logston et al.		
	CD	5,481,613	1/2/96	Ford et al.		
	CE	5,488,410	1/30/96	Lieberfarb et al.		
	CF	5,497,422	3/5/96	Tysen et al.		
	CG	5,499,294	3/12/96	Friedman		
	CH	5,499,295	3/12/96	Cooper		
	CI	5,506,904	4/9/96	Sheldrick et al.		
	CJ	5,509,073	4/16/96	Monnin et al.		
	CK	5,519,780	5/21/96	Woo et al.		
	CL	5,524,052	6/4/96	Augustine et al.		
	CM	5,550,984	8/27/96	Gelb		
	CN	5,557,678	9/17/96	Ganesan		
	CO	5,557,765	9/17/96	Lipner et al.		
	CP	5,588,058	12/24/96	Le Berre		
	CQ	5,559,889	9/24/96	Easter et al.		
	CR	5,563,950	10/8/96	Easter et al.		
	CS	5,565,909	10/15/96	Thibadeau et al.		
	CT	5,568,552	10/22/96	Davis		

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LIST OF ART CITED BY APPLICANT

(Use several sheets if necessary)

Attorney Docket No.

A-7598

Serial No.

09/930,901

Filing Date

AUGUST 16, 2001

Applicant:

AKINS ET AL.

Group

2132

U.S. PATENT DOCUMENTS

Exami ner's Initial		Document No.	Date	Name	Class	Subclass
	CU	5,568,554	10/22/96	Eastlake 3rd		
	CV	5,583,939	12/10/96	Chang et al.		
	CW	5,590,202	12/31/96	Bestler et al.		
	CX	5,621,793	4/15/97	Bednarek et al.		
	CY	5,671,276	9/23/97	Eyer et al.		
	CZ	5,675,649	10/7/97	Brennan et al.		
	DA	5,740,246	4/14/98	Saito		
	DB	5,742,677	4/21/98	Pinder et al.		
	DC	5,764,770	6/9/98	Schipper et al.		
	DD	5,787,172	7/28/98	Arnold		
	DE	5,857,020	1/5/99	Peterson, Jr.		
	DF	5,862,220	1/19/99	Perlman		
	DG	5,870,474	2/9/99	Wasilewski et al.		
	DH	5,920,626	7/6/99	Durden et al.		
	DI	6,005,938	12/21/99	Banker et al.		
	DJ	6,105,134	8/15/00	Pinder et al.		
	DK	6,246,767	6/12/01	Akins, III et al.		

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AKINS ET AL.

Group

2132

U.S. PATENT DOCUMENTS

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	DL	RE33,189	3/27/90	Lee et al.		
	DM	RE33,808	1/28/92	Wright, Jr.		

FOREIGN PATENT DOCUMENTS

		Document No.	Date	Country	Class	Subclass	Translation
	DN	EP 0 723 371 A ✓	7/24/96	Europe			
	DO	EP 0 752 786 A ✓	1/8/97	Europe			
	DP	WO 94/13107 A ✓	6/9/94	PCT International			
	DQ	WO 95/29560 A ✓	11/2/95	PCT International			

OTHER PRIOR ART (Including Author Title, Date, Pertinent Pages, Etc.)

Exami ner's Initial		Document No.	Date	Name	Class	Subclass
	DR	ISO/IEC 13818-1, "Information Technology – Generic Coding of Moving Pictures and Associated Audio Systems," Draft of: November 13, 1994. ✓				
	DS	ISO/IEC JTC1/SC29/WG11, "Universal Multi-Program Multiplex and Transport for MPEG-2 Systems," January 1993. ✓				
	DT	ISO/IEC JTC1/SC29/WG11, "An MPEG-2 Multi-Program Multiplex Syntax," January 1993. ✓				
	DU	ISO/IEC JTC1/SC29/WG11, "Requirements and Method for High-Level Multiplexing of MPEG and Other Digital Service Bitstreams with Universal Transport Layer," November 1992. ✓				
	DV	Whitfield, Diffie, "Authentication and Authenticated Key Exchanges," DESIGNS, CODES AND CRYPTOGRAPHY, An International Journal, Vol. 2, No. 2, June 1992, pages 107-125.				
	DW	Schneier, Bruce, "Applied Cryptography Second Edition: Protocols, Algorithms and Source Code in C," pages 357-363. ✓				

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	DX	Menezes, Alfred J., "Handbook of Applied Cryptography," pages 506-525.				
	DY	TM-1244 Rev. 4, "Final Technical Report of the Conditional Access Specialist Group," November 17, 1994.				
	DZ	Coutrot et al., "A Single Conditional Access System for Satellite-Cable and Terrestrial TV," IEEE Transactions on Consumer Electronics, Vol. 35, No. 3, August 1989, pages 464-468.				
	EA	Louis Claude Guillou and Jean-Luc Giachetti, "Encipherment and Conditional Access," SMPTE Journal, 103 (1994) June, No. 6, White Plains, NY.				
	EB					
	EC					
	ED					
	EE					
	EF					
	EG					
	EH					
	EI					
	EJ					
EXAMINER				DATE CONSIDERED:		
EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance. Include copy of this form with next communication to Applicant.						